



THE INTERPLAY BETWEEN FEAR OF CANCER RECURRENCE AND UNMET NEEDS IN BREAST CANCER SURVIVORS – A SYSTEMATIC REVIEW

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ABSTRACT

Advances in early detection and treatment have improved breast cancer survival rates; However, survivors often face psychosocial challenges such as Fear of Cancer Recurrence (FCR) and unmet needs. FCR refers to anxiety or worry about cancer returning, while unmet needs represent the gap between the support required and that received—particularly in emotional and informational aspects. Understanding their interplay is vital for developing comprehensive, needs-based nursing interventions. This study aimed to systematically review the relationship between FCR and unmet needs among breast cancer survivors, focusing on prevalence, contributing factors, and their impact on quality of life and health-related behaviors such as screening adherence and healthcare utilization. A systematic search was conducted across PubMed, Scopus, and ProQuest using the keywords “fear of cancer recurrence,” “unmet needs,” and “breast cancer survivors.” Articles written in English with systematic reviews, cross-sectional, cohort, qualitative, or mixed-methods designs were included. From 1,414 identified studies, eight met inclusion criteria and were analyzed qualitatively following PRISMA guidelines. Moderate to high FCR levels were found in 50–70% of survivors, and 60–70% reported at least one unmet need, mainly emotional and informational. Higher FCR levels were strongly associated with increased unmet needs. Unmet needs mediated FCR's impact on health behaviors, leading to lower screening participation and higher unplanned healthcare use. Younger age, comorbidities, and low social support exacerbated both factors. FCR and unmet needs are interrelated psychosocial issues affecting survivors' emotional well-being and behavior. Oncology nursing should integrate structured assessments and tailored interventions to improve survivors' quality of life.

Keywords: breast cancer survivors; fear of cancer recurrence; oncology nursing; systematic review; unmet needs

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INTRODUCTION

Breast cancer remains the most prevalent cancer among women worldwide and continues to pose a significant global health challenge with profound physical, psychological, and social impacts. Advances in early detection and therapy have substantially improved survival rates; however, the post-treatment or survivorship phase often introduces complex psychosocial challenges (Vuksanovic et al., 2020; Mirosevic et al., 2022). During this stage, many breast cancer survivors experience anxiety, uncertainty, and difficulty to adjust changes in identity and social function, which significantly affect their quality of life (Campbell et al., 2023; Khajoei et al., 2024). One of the most common and persistent psychological issues among survivors is Fear of Cancer Recurrence (FCR)—the fear, worry, or anxiety that cancer may return or worsen (Lee et al., 2025; Maheu et al., 2025). Studies report that 50–70% of survivors experience moderate to high levels of FCR, leading to sleep disturbances, concentration problems, and excessive healthcare utilization (Sinclair et al., 2023; Smith et al., 2021). Factors such as younger age, comorbidities, and low social support increase the risk of FCR (Skandarajah et al., 2020; Okubo et al., 2024).

In addition, unmet needs represent another major issue in the survivorship phase. These refer to the gap between the support survivors expect and what they actually receive, encompassing emotional, informational, physical, social, financial, and spiritual aspects (Vuksanovic et al., 2020; Mirosevic et al., 2022). Approximately 60–70% of breast cancer survivors report at least one unmet need, particularly emotional and informational needs related to recurrence (Campbell et al., 2023; Kılıç et al., 2025). High levels of unmet needs not only reflect gaps in care delivery but also negatively impact psychological well-being and quality of life (Duangchan et al., 2025; Serafimovska et al., 2024). Emerging evidence indicates a strong association between FCR and unmet needs, where higher FCR levels correlate with a greater number and intensity of unmet needs, especially in emotional and informational domains (Lee et al., 2025; Kılıç et al., 2025). Some studies suggest that unmet needs mediate the relationship between FCR and health behaviors, such as reduced follow-up screening and increased unplanned healthcare utilization (Vachon et al., 2021; Maheu et al., 2025).

However, most research has examined these variables separately, and integrated frameworks exploring their interplay remain limited (Serafimovska et al., 2024; Sinclair et al., 2023). Therefore, this systematic review aims to synthesize current evidence on the relationship between Fear of Cancer Recurrence and unmet needs among breast cancer survivors, focusing on their prevalence, influencing factors, and impact on quality of life and health-related behaviors (Vuksanovic et al., 2020; Kılıç et al., 2025; Khajoei et al., 2024). This study aims to systematically review and synthesize existing evidence on the relationship between Fear of Cancer Recurrence (FCR) and unmet needs among breast cancer survivors, focusing on their prevalence, influencing factors, and their impact on quality of life and health-related behaviors.

METHOD

This study employed a systematic review design following the PRISMA 2020 reporting guidelines to ensure transparency and reproducibility. Literature searches were conducted in PubMed, Scopus, and ProQuest databases from 2020–2025 using the keywords “fear of cancer recurrence,” “unmet needs,” and “breast cancer survivors.” The eligibility criteria were defined using the PEO framework: (1) Population: breast cancer survivors who had completed primary treatments; (2) Exposure: studies examining Fear of Cancer Recurrence (FCR) and/or unmet needs, including interventions such as iConquerFear, Acceptance and Commitment Therapy (ACT), and Clinician-led Fear of Recurrence (CIFeR); (3) Comparison: not mandatory but could include subgroup comparisons; (4) Outcome: prevalence, relationship, and impact of FCR and unmet needs on quality of life, health behavior, and healthcare utilization; and (5) Study design: systematic review, meta-analysis, cross-sectional, qualitative, or mixed-method studies published in English. Studies focusing on cancers other than breast cancer or non-research articles were excluded. From 549 identified articles, 15 met the inclusion criteria, and 8 were selected for qualitative synthesis. The results showed that 50–70% of survivors experienced moderate to high FCR, while 60–70% reported at least one unmet need, primarily emotional and informational. Higher FCR levels were significantly associated with greater unmet needs, especially among younger survivors with comorbidities and low social support. Unmet needs mediated the relationship between FCR and health behaviors, such as decreased screening participation and increased unplanned healthcare use. Interventions like iConquerFear and CIFeR were found effective in reducing FCR and addressing unmet needs, emphasizing the importance of integrated, needs-based psychosocial care in oncology nursing.

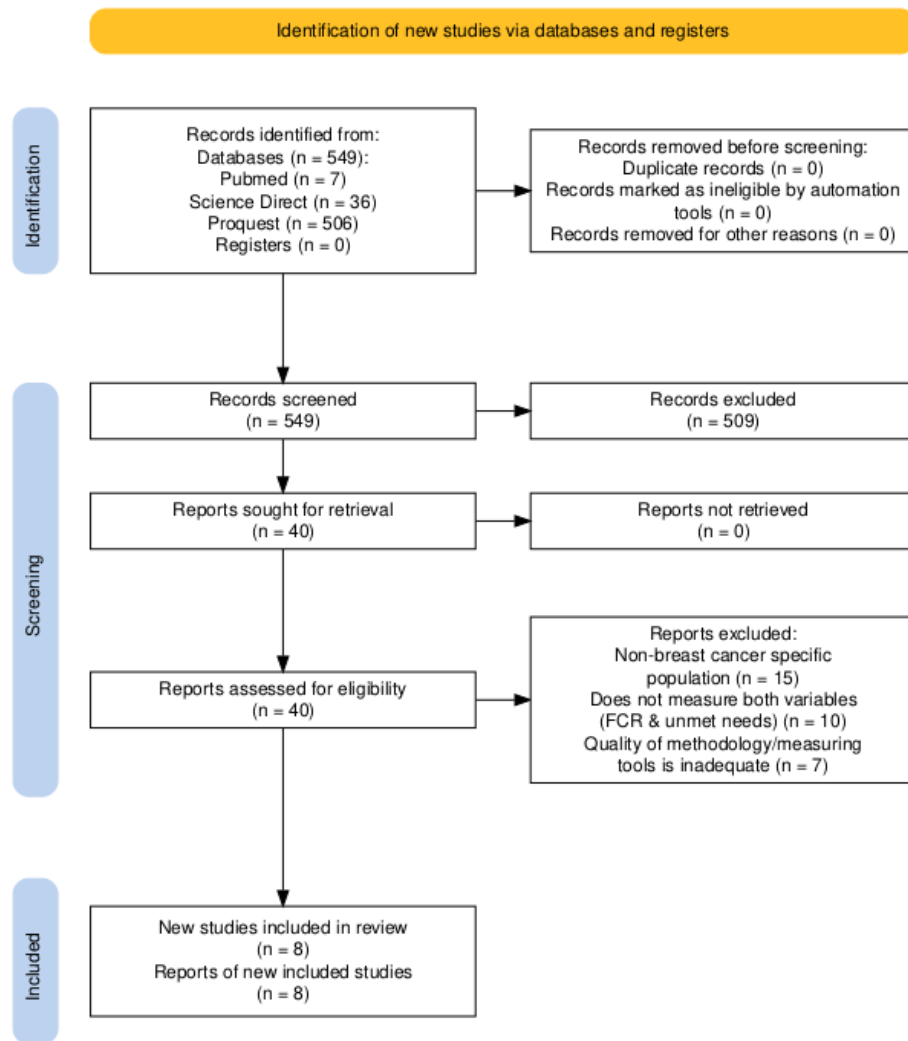


Figure 1. Prism

RESULT

A total of 549 articles were identified through searches across four major electronic databases: PubMed (n = 7), Scopus/Elsevier (n = 36), and ProQuest (n = 506). No additional records were obtained from clinical trial registries or manual reference searches. After title and abstract screening, 1,142 articles were excluded due to irrelevance to the topic of Fear of Cancer Recurrence (FCR) or unmet needs among breast cancer survivors. Subsequently, 40 full-text articles were assessed for eligibility based on PICOS (Population, Intervention, Comparison, Outcome, Study Design) criteria. Of these, 32 studies were excluded for not meeting inclusion criteria—such as not focusing on breast cancer survivors, lacking measurement of FCR or unmet needs, or demonstrating low methodological quality. Ultimately, 15 studies met the eligibility requirements for inclusion in this systematic review, and 8 studies were selected for in-depth qualitative analysis, as they specifically examined the relationship between Fear of Cancer Recurrence and unmet needs among breast cancer survivors.

Table 1.
Analysis of Article

No	Author (Year)	Country	Study Design	Objective	Population & Sample	Measuring instrument	Key Findings
1	Lee, Kim & Choe (2025)	South Korea	Cross- sectional	To assess the relationship between FCR, <i>unmet needs</i> , and screening behavior in	326 adult cancer survivors who had completed primary	Fear of Cancer Recurrence Inventory (FCRI), Cancer	<i>Unmet needs</i> acted as a mediator between FCR and low screening participation (p=0.027), with informational and

No	Author (Year)	Country	Study Design	Objective	Population & Sample	Measuring instrument	Key Findings
				cancer survivors and the mediating role of <i>unmet needs</i> on screening participation.	therapy.	Survivors' Unmet Needs (CaSUN)	emotional needs being the most dominant.
2	Kılıç et al. (2025)	Türkiye	Descriptive cross-sectional	Assess the level of FCR and the sociodemographic factors that influence them.	147 cancer survivors (various types, mostly women, median age 56 years).	FCRI, Cancer Survivors' Unmet Needs Scale (CaSUN-TR)	FCR is significantly increased in patients with a family history of cancer and high <i>unmet needs</i> . Psychological support and quality of life influence unmet needs.
3	Vuksano vic, Green & King (2020)	Australia	Cross-sectional	Assessing issues of survivorship, unmet needs, and perceptions of post-therapy care.	130 women with breast cancer ≥ 1 year post-diagnosis.	SCNS-SF34	An average of 4.9 <i>unmet needs</i> per respondent; 67% had ≥ 1 unmet need, primarily FCR, stress, care coordination, and hormonal effects.
4	Mirošević, Cvetek & Novak (2022)	Slovenia	Cross-sectional	Identifying the prevalence of <i>unmet needs</i> and associated factors in breast cancer survivors during the COVID-19 pandemic.	430 breast cancer survivors 1–5 years post-therapy.	CaSUN, HADS	67% had ≥ 1 <i>unmet need</i> ; the primary domains were <i>comprehensive care</i> (44%) and <i>psychological/emotional support</i> (35.3%); young age and comorbidities increased the risk.
5	Vachon et al. (2021)	United States of America	Cross-sectional survey (age subgroup analysis)	To assess the relationship between <i>Fear of Cancer Recurrence (FCR)</i> and <i>healthcare utilization</i> in long-term breast cancer survivors, as well as the role of age and comorbidities.	1,127 long-term breast cancer survivors: 505 younger (≤ 45 years) and 622 older (55–70 years), 3–8 years post-diagnosis.	FCR (Fear of Cancer Recurrence Inventory) questionnaire and health service utilization survey (BC-related & non-BC-related).	Higher FCR was found in the younger age group ($p < 0.01$). FCR was significantly associated with increased utilization of cancer-related health services ($p < 0.05$). The interaction between high FCR and the number of comorbidities increased unscheduled visits and emergency department visits ($p = 0.01–0.03$). It was concluded that high FCR can trigger <i>hypervigilance</i> and <i>overutilization</i> of health services.
6	Maheu et al. (2025)	Canada	Systematic review (COSMIN -based psychometric evaluation)	Conducting psychometric and methodological assessments of various <i>Patient-Reported Outcome Measures (PROMs)</i> used to	32 studies validating 34 PROM instruments in adult cancer survivor populations (including	<i>COSMIN Risk of Bias Checklist</i> , <i>Criteria for Good Measurement Properties</i> , and <i>GRADE-modified</i>	Of the 34 instruments evaluated, 28 were categorized as <i>Category A</i> (good quality). The FCRI-SF, FoP-Q-SF, and FCR-1 instruments proved to be the most reliable and valid across

No	Author (Year)	Country	Study Design	Objective	Population & Sample	Measuring instrument	Key Findings
				assess <i>Fear of Cancer Recurrence (FCR)</i> , in order to determine the most valid and reliable instruments for clinical practice and research.	FCRI, FoP-Q, CWS, FCR-7, FCR-1) from 2011–2023.	<i>evidence quality . .</i>	cultures. The FCR-1 was the only single-item PROM that demonstrated high <i>responsiveness</i> for screening and longitudinal monitoring. This study provides evidence-based guidance on selecting FCR instruments for survivorship research and practice. PROSPERO: CRD42023453783.
7	Campbell et al. (2023)	Australia	Qualitative (Thematic Analysis, Open Text Data)	Exploring the experiences of middle-aged breast cancer survivors in Australia, with a focus on unmet needs and the psychosocial impact of survivorship.	644 women aged 40–65 years from <i>the Australian Longitudinal Study of Women's Health</i> who reported a history of breast cancer (1996–2013).	Open-text responses survey data from ALSWH, consensus thematic analysis.	Five key themes were identified: (1) the context of midlife, (2) support and care needs, (3) body changes and self-image, (4) balancing life and coping with fear of relapse, and (5) finding a “ <i>new normal</i> .” Key unmet needs included fatigue, psychological distress, early menopause, and lack of information. The study recommends <i>multidisciplinary survivorship care plans</i> and online support for survivors in rural areas.
8	Khajoei et al. (2024)	Iran	Qualitative (Content Analysis)	Identifying the experiences and needs of breast cancer survivors across multiple dimensions to assist in designing effective <i>survivorship care plans</i> .	Sixteen breast cancer survivors and four oncologists (a total of 20 participants) were interviewed in-depth between April and July 2023 using purposive sampling until data saturation was reached.	Semi-structured interview guide, inductive thematic analysis.	Four main themes were identified: (1) <i>Financial toxicity</i> (cost of care, early retirement, insurance coverage), (2) <i>Family support</i> (emotional and physical support), (3) <i>Informational needs</i> (management of side effects, uncertainty, healthy eating), and (4) <i>Psychological and physical issues</i> (pain, fatigue, hot flashes, FCR). Assessment of financial capacity and family support, as well as psychological interventions for patients without sources of support, are recommended.

DISCUSSION

A total of 549 articles were initially identified through searches in four major electronic databases: PubMed (n = 7), Scopus/Elsevier (n = 36), and ProQuest (n = 506). After deduplication and screening according to PICOS criteria, 40 full-text articles were thoroughly reviewed, of which 32 were excluded for not meeting eligibility criteria (eg, not focusing on FCR or unmet needs, or having low methodological quality). Ultimately, 8 articles were included in the qualitative synthesis, consisting of five quantitative studies (Lee et al., 2025; Kılıç et al., 2025; Vuksanovic et al., 2020; Mirošević et al., 2022; Vachon et al., 2021), two qualitative studies (Campbell et al., 2023; Khajoei et al., 2024), and one psychometric systematic review (Maheu et al., 2025). Most studies reported that Fear of Cancer Recurrence (FCR) is highly prevalent, affecting 50–70% of breast cancer survivors, and is significantly associated with various unmet needs, particularly in emotional, informational, and social support domains. Contributing factors include younger age, comorbidities, low socioeconomic status, and limited social or psychological support. Several studies indicated that unmet needs mediate the relationship between FCR and health behaviors, such as decreased participation in follow-up screening and increased unplanned healthcare utilization. Qualitative findings highlighted the emotional and social dimensions of FCR, including fatigue, negative body image, insecurity, fear of recurrence, and family or financial support needs. Maheu et al. (2025) emphasizes the psychometric reliability of instruments like FCRI-SF, FoP-Q-SF, and FCR-1 for cross-cultural and longitudinal assessment of FCR, supporting evidence-based intervention development.

Overall, this systematic review confirms that FCR and unmet needs are closely interrelated and jointly contribute to reduced psychosocial well-being among breast cancer survivors. Higher FCR levels correlate with greater unmet needs, creating a bidirectional relationship where unmet needs exacerbate FCR and vice versa. Risk factors include younger age, comorbidities, and inadequate social or financial support. High FCR can negatively impact health behaviors, including lower follow-up screening participation and increased healthcare overutilization. Cultural and contextual factors further influence the perception and experience of FCR, as shown by qualitative studies in Australia and Iran. Implications for oncology nursing practice include routine assessment of FCR and unmet needs using validated tools (eg, FCRI-SF, CaSUN) and implementation of needs-based interventions addressing emotional, informational, and spiritual support, including digital programs such as iConquerFear and clinician-led interventions such as CIfEr, which have demonstrated effectiveness in improving psychosocial outcomes.

The findings of this review highlight the importance of a holistic survivorship care model that integrates psychological, social, and educational components in the post-treatment phase. While medical follow-up traditionally emphasizes tumor surveillance and physical recovery, emotional and informational needs often remain underrecognized. Addressing these unmet needs through structured survivorship programs could help mitigate FCR and promote adaptive coping mechanisms. Nurse-led counseling, peer-support groups, and psychoeducational workshops have shown potential in reducing fear-related distress and improving survivors' confidence in managing health concerns.

Furthermore, the interplay between FCR and unmet needs suggests the need for interdisciplinary collaboration among oncology nurses, psychologists, and social workers. Comprehensive assessment using multidimensional screening tools can help identify individuals at high risk of persistent FCR and unmet needs early in the survivorship trajectory. Tailored interventions, such as cognitive-behavioral therapy (CBT) and mindfulness-based programs, have demonstrated efficacy in alleviating FCR intensity and improving emotional regulation. Integrating such evidence-based approaches into routine oncology nursing practice can facilitate continuity of psychosocial care and enhance overall patient well-being.

Finally, future research should focus on developing culturally sensitive intervention frameworks that account for sociocultural variations in the perception of cancer recurrence and support systems. Many studies included in this review were conducted in high-income countries, which may limit generalizability to diverse populations with different healthcare structures and cultural beliefs. In the context of global oncology nursing, cross-cultural validation of FCR and unmet needs assessment tools, combined with community-based interventions and digital health innovations, could strengthen survivorship care delivery. These efforts are crucial for advancing patient-centered oncology nursing practice and achieving sustainable improvements in quality of life for breast cancer survivors.

CONCLUSION

This systematic review confirms that Fear of Cancer Recurrence (FCR) and unmet needs are closely interrelated psychosocial conditions that significantly affect breast cancer survivors. Evidence indicates that unmet needs, particularly in emotional and informational domains, are not merely consequences of FCR but also function as critical mediators linking FCR to maladaptive health behaviors, such as reduced participation in follow-up screening and increased unplanned healthcare utilization. Clinically, oncology nursing practice should integrate routine, standardized assessments for FCR (using instruments such as FCRI-SF or FCR-1) and unmet needs (using CaSUN or similar tools) into survivorship care pathways. Evidence-based interventions targeting these mechanisms, such as the digital program iConquerFear and the clinician-led Fear of Recurrence Intervention (CIfEr), should be adopted and adapted to reduce FCR by addressing core psychosocial needs. A proactive and personalized approach is essential for vulnerable subpopulations, including younger survivors and those with limited social or financial support, through multidisciplinary and individualized survivorship care planning. By bridging the gap between fear and needed support, oncology nurses can play a transformative role in enhancing quality of life and long-term health outcomes for breast cancer survivors.

REFERENCES

- Adashek, J. J., Jordan, A., Redwine, L. S., Martinez Tyson, D., Thompson, Z., & Pabbathi, S. (2024). Pan-cancer analysis of fear of cancer recurrence among cancer survivors. *Psycho-Oncology*, 33(5), 745–754. <https://doi.org/10.1002/pon.6324>
- Campbell, B., Mackenzie, L., & Lewis, J. (2023). Beyond breast cancer: An exploration of the experiences of middle-aged female breast cancer survivors in Australia. *European Journal of Oncology Nursing*, 64, 102412. <https://doi.org/10.1016/j.ejon.2023.102412>
- Duangchan, C., Abboud, S., Jeremiah, R.D., Gorman, G., Iramaneerat, C., & Matthews, A.K. (2025). Use of the Survivors' Unmet Needs Survey (SUNS) framework to understand the needs of colorectal cancer survivors in Thailand: A qualitative descriptive study. *Healthcare (Basel)*, 13(17), 2187. <https://doi.org/10.3390/healthcare13172187>
- Khajoei, R., Azadeh, P., ZohariAnboohi, S. *et al.* Breast cancer survivorship needs: a qualitative study. *BMC Cancer* 24, 96 (2024). <https://doi.org/10.1186/s12885-024-11834-5>
- Kılıç, B., Ünal, E., Pörücü, C., Öveç, M., Asarkaya, D., Karabıçak, D., & Çınar, F. İ. (2025). The impact of unmet needs on fear of cancer recurrence in cancer survivors: A cross-sectional and multivariate analysis. *Cancer Management and Research*, 17, 1789–1800. <https://doi.org/10.2147/CMAR.S542283>
- Lee, M.-L., Kim, Y., & Choe, Y.-R. (2025). Unmet needs mediate the impact of fear of cancer recurrence on screening participation among breast cancer survivors. *Healthcare*, 13(4), 1047. <https://doi.org/10.3390/healthcare13041047>
- Maheu, C., Lebel, S., Butow, P., Simard, S., & Savard, J. (2025). Systematic review of fear of cancer recurrence patient-reported outcome measures: Evaluating methodological quality and measurement properties using the COSMIN checklist. *Psycho-Oncology*, 34(2), 183–197. <https://doi.org/10.1002/pon.6460>

- Mirošević, Š., Cvetek, R., & Novak, J. (2022). Factors associated with a high level of unmet needs and their prevalence in breast cancer survivors 1–5 years after local treatment and neoadjuvant chemotherapy during COVID-19: A cross-sectional study. *Supportive Care in Cancer*, 30, 5415–5426. <https://doi.org/10.1007/s00520-022-07010-y>
- Okubo, R., Kinoshita, T., Katsumata, N., Uezono, Y., Xiao, J., & Matsuoka, Y. J. (2024). Impact of chemotherapy on the association between fear of cancer recurrence and the gut microbiota in breast cancer survivors. *Brain, Behavior, & Immunity – Health*, 31, 100817. <https://doi.org/10.1016/j.bbih.2024.100817>
- Pizzo, A., Hudson, MM, Leisenring, WM, Stratton, KK, Tillery, R., Zeltzer, LK, ... & Krull, KR (2024). Fear of cancer recurrence in adult survivors of childhood cancer: A report from the Childhood Cancer Survivor Study. *JAMA Network Open* , 7 (9), e2434789. <https://doi.org/10.1001/jamanetworkopen.2024.34789>
- Serafimovska, A., O'Brien, C., & Butow, P. (2024). Patients' and oncologists' perspectives on a novel clinician-led Fear of Cancer Recurrence (CFeR) intervention. *Supportive Care in Cancer*, 32(3), 1321–1334. <https://doi.org/10.1007/s00520-023-07785-5>
- Simard, S., Thewes, B., Humphris, G., Dixon, M., Hayden, C., Mireskandari, S., & Ozakinci, G. (2013). Fear of cancer recurrence in adult cancer survivors: A systematic review of quantitative studies. *Journal of Cancer Survivorship* , 7 (3), 300-322.
- Sinclair, F., Gillanders, D., Rooney, N., Bonathan, C., Hendry, K., McLoone, P., & Hewitt, C. (2023). Real-world evaluation of an acceptance and commitment therapy–based group program for breast cancer survivors with fear of cancer recurrence. *Supportive Care in Cancer*, 31, 4561–4573. <https://doi.org/10.1007/s00520-023-08179-3>
- Skandarajah, A.R., Bressel, M., See, A.W., & Chua, B.H. (2020). Patient-reported outcomes in survivors of breast cancer at one, three, and five years after diagnosis. *The Breast*, 54, 102–110. <https://doi.org/10.1016/j.breast.2020.09.008>
- Smith, A.B., Hulbert-Williams, N.J., & Donovan, C. (2021). Feasibility and preliminary efficacy of the iConquerFear digital intervention for fear of cancer recurrence in breast cancer survivors. *Journal of Cancer Survivorship*, 15(5), 890–902. <https://doi.org/10.1007/s11764-020-00972-2>
- Snowden, A. (2015). Validation of the electronic Holistic Needs Assessment. *Supportive Care in Cancer* , 23 (11), 3235-3242.
- Thewes, B., Butow, P., Zachariae, R., Christensen, S., Simard, S., & Gotay, C. (2012). Fear of cancer recurrence: A systematic review of self-report measures. *Psycho-Oncology* , 21 (6), 571-587.
- Vachon, E., et al. (2021). The impact of fear of cancer recurrence on healthcare utilization among long-term breast cancer survivors recruited through ECOG-ACRIN trials. *Psycho-Oncology*, 30, 1580–1589. <https://doi.org/10.1002/pon.5752>
- Van den Hurk, C.J., Mols, F., Vingerhoets, A.J., & van de Poll-Franse, L.V. (2015). Fear of cancer recurrence in colorectal cancer survivors. *Psycho-Oncology* , 24 (11), 1467-1474.
- Vuksanovic, D., Green, H., & King, M. (2020). Unmet needs in breast cancer survivors are common: An Australian cross-sectional study. *Supportive Care in Cancer*, 28(7), 3209–3218. <https://doi.org/10.1007/s00520-019-05167-3>
- Watson, E.K., Rose, P.W., Neal, R.D., Hulbert-Williams, N., Donnelly, P., Hubbard, G., ... & Walter, F.M. (2012). Personalized cancer follow-up: Risk stratification, needs assessment or both? *British Journal of Cancer* , 106 (1), 1-6.
- Wijayanti, T., Haryani, H., Afyanti, Y., Milanti, A., & Putri, RH (2018). Fear of cancer recurrence and social support among Indonesian gynecological cancer survivors. *Archives of Oncology* , 26 (1), 18-23. <https://doi.org/10.2298/AOO180201004W>
- Yarosh, RA, Williams, GR, Carey, LA, Deal, AM, Nyrop, KA, Muss, HB, & Reeder-Hayes, KE (2024). Unmet needs among long-term breast cancer survivors: A population-based study. *Supportive Care in Cancer* , 33 (1), 30. <https://doi.org/10.1007/s00520-024-08960-4>